WHAT IS CLAIMED:

1. A method of preparing a template capable of forming a three-dimensional object from two-dimensional material, comprising the steps of:

inscribing a first outer arc on a surface of the material, the first outer arc having a first radius of curvature and a first endpoint;

inscribing a second outer arc, the second outer arc having a radius of curvature equal to the first radius of curvature, wherein the center of the second outer arc is at the first endpoint, and the second outer arc intersects the first outer arc to form a first outer vertex;

inscribing a third outer arc having a third radius of curvature equal to the first radius of curvature and having its center at the first vertex, wherein the third outer arc intersects the first outer arc and the second outer arc to form a second outer vertex and a third outer vertex;

inscribing three inner arcs, the inner arcs each having a radius of curvature equal to each other but less than the first radius, wherein each of the three inner arcs intersect with each other to form first, second, and third inner vertices; and

separating the material inscribed by the first, second, and third outer arcs to form a template.

2. The method of claim 1, wherein each of the inner arcs is parallel to at least one of the first, second, or third outer arcs.

3. The method of claim 1, wherein the material between the outer arcs and the inner arcs defines a sidewall region, an area of the sidewall region near each of the outer vertices further defining corner regions, and wherein the material enclosed within the inner arcs defines a base region.

4. The method of claim 3, further comprising the step of manipulating the material of the template within the sidewall region, and folding the sidewall region material along at least one of the first, second or third inner arcs to form a three-dimensional object.

5. The method of claim 4, wherein the step of manipulating the material further comprises removing material from at least one of the corner regions of the template.

6. The method of claim 5, further comprising the step of inscribing edge lines into the material of at least one of the corner regions to define the material that is to be removed from the template.

7. The method of claim 6, wherein the sidewall region material along at least two of the first, second, and third inner arcs are folded, and further comprising the step of joining adjacent edge lines together after the material has been folded.

8. The method of claim 1, further comprising the step of scoring the material along the first, second, and third inner arcs to facilitate folding the material to form a three-dimensional object.

9. The method of claim 1, further comprising the steps of inscribing additional arcs located between the outer arcs and the inner arcs.

10. The method of claim 4, wherein the step of manipulating the material further comprises folding the material of at least one of the corner regions of the template.

11. The method of claim 10, further comprising the step of inscribing edge lines and fold lines into the material of at least one of the corner regions of the template to define how the material is to be folded.

12. The method of claim 4, wherein the step of manipulating the material further comprises cutting the material of at least one of the corner regions of the template.

13. A three-dimensional object produced according to the process of claim 4.

14. The method of claim 4, further comprising folding the material along each of the first, second, and third inner arcs in an upward direction relative to the base region to create a three-dimensional object.

15. A method of forming a three-dimensional object from a piece of two-dimensional material comprising the steps of:

inscribing an outer perimeter on a surface of the material comprising at least three intersecting outer arcs, the outer arcs defining an interior, the at least three outer arcs curving outwardly from the interior;

inscribing a inner perimeter within the outer perimeter, the inner perimeter defining a base region therein, and the outer perimeter and the inner perimeter defining at least three sidewall regions therebetween;

adding additional geometric information to the sidewall region; and

manipulating the sidewall region to form a three-dimensional object with a plurality of sidewalls.

16. The method of claim 15, wherein the step of adding additional geometric information further comprises the steps of:

adding reference indicators to the surface of the material;

using the reference indicators to define a plurality of reference points; and

using the plurality of reference points to inscribe additional lines into the material.

17. The method of claim 16, wherein the additional lines are inscribed into the sidewall region of the template.

18. The method of claim 15, wherein the outer perimeter is an exploded non-Euclidean triangle.

19. The method of claim 18, wherein the inner perimeter is an exploded non-Euclidean triangle that is parallel to the outer perimeter.

20. The method of claim 15, wherein the outer perimeter is an exploded non-Euclidean polygon.

21. A three-dimensional object comprising a base and a plurality of sidewalls, wherein the object is formed by a method comprising the steps of:

inscribing a first arc on a surface of a two-dimensional material, the first arc having a first radius of curvature and a first endpoint;

inscribing a second arc, the second arc having a radius of curvature equal to the first radius of curvature, wherein the center of the second arc is at the first endpoint, and the second arc intersects the first arc to form a first outer vertex;

inscribing a third arc having a third radius of curvature equal to the first radius of curvature and having its center at the first vertex, wherein the third arc intersects the first arc and the second arc to form a second outer vertex and a third outer vertex;

inscribing three inner arcs, the inner arcs each having a radius of curvature equal to each other but less than the first radius, wherein each of the three inner arcs intersect with each other to form first, second, and third inner vertices;

separating the material inscribed by the first, second, and third outer arcs to form a template; and

manipulating the material of the template within the sidewall region, and folding the material along at least one of the first, second or third inner arcs to form a three-dimensional object.

22. A non-Euclidean three-dimensional object suitable for use as a plate or bowl comprising:

a substantially flat base defining a base plane and comprising three outwardly curving base arcs, the base arcs intersecting each other to form three base vertices;

three substantially flat sidewalls attached to the base, each sidewall projecting upwardly at an angle to the base plane, each sidewall comprising at least one outwardly curving sidewall arc to form a top sidewall edge, each sidewall arc being spaced apart from and parallel to at least one of the base arcs; and

three corner edges connecting the sidewalls, each corner edge originating at the base vertices and projecting upwardly at an angle to the base plane, the sidewalls being joined together to each other at the corner edges,

whereby the base and sidewalls form a three-dimensional plate or bowl capable of holding food.

23. An object according to claim 22, wherein an angle is formed between the base and the sidewalls that is greater than 0° and less than or equal to 90°.